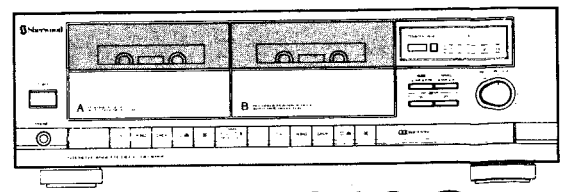
OPERATING INSTRUCTIONS
BEDIENUNG SANLEITUNG



DD-1010C

Stereo Double Cassette Deck
Stereo-Doppel-Cassettendeck

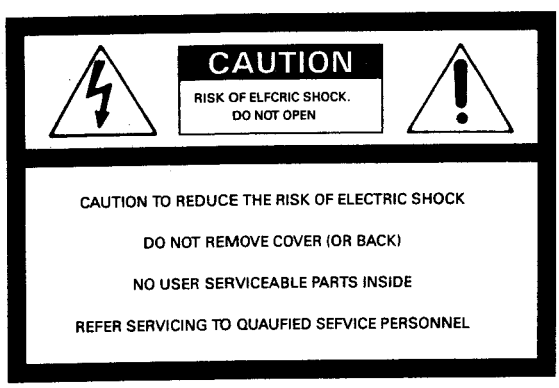
Sherwood

TM
Live Performance Sound

Unpacking and Installation

Congratulations on Your Purchase!

Your new high fidelity Tape Deck is designed to deliver maximum enjoyment and years of trouble free service. please take a few moments to read this manual throughly. It will explain the features and operation of your Tape Deck and help insure a trouble free installation. Please unpack your Tape Deck carefully. We recommend that you save the carton and packing material.
They will be helpful should you ever need to move your unit and may be required if you ever need to return it for service.
Your Tape Deck is designed to be placed in a horizontal position and it is important to allow at least two inches of space behind your unit for adequate ventilation and cabling convenience. To avoid early damage, never place the unit near radiators, in front of heating vents, in direct sun light, or in excessively humid or dusty location. Connect your complementary components as illustrated in the following section.


CAUTION
RISK OF ELFCRIC SHOCK.
DO NOT OPEN
CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUAUFIED SEFVICE PERSONNEL

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Attention: Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.

Read this Before Operating Your Unit

FOR THE U.S.A. AND CANADA 120V

FOR YOUR SAFETY

Units shipped to the U.S.A and Canada are designed for operation on 120 volts AC only.

Safety precaution for a Polarized AC plug.
However, some products may be supplied with a non-polarized plug.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZE) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

FOR THE UNITED KINGDOM 240V

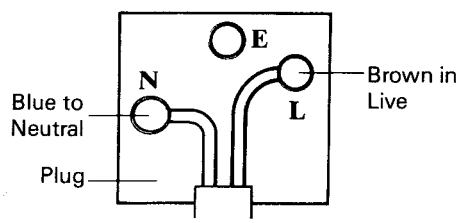
FOR YOUR SAFETY

Units shipped to the U.K. are designed for operation on 240 volts AC only.

The mains plug must be removed from the wall socket prior to any internal examination.

The wires in this mains lead are coloured in accordance with the following code:
Blue . . . . . Neutral
Brown . . . . . Live

The wires in this mains lead must be connected to the terminals in the plug as follows:
Wire colour
Blue . . . . . N or Black
Brown . . . . . L or Red



NOTES:

1. If a 13-amp plug is used, this must be fitted with a 3-amp fuse.
2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

"FOR ADDED SAFETY, WHEN CONNECTING THE AC MAINS LEAD TO A 3 PIN PLUG PLEASE USE A 5A FUSE APPROVED BY ASTA TO BS1362, I.E. CARRIES THE ASA MARK."

FOR AUSTRALIA AND EUROPE 220V/230V/240V

FOR YOUR SAFETY

Units shipped to Australia are designed for operation on 240V AC only.
To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the powerpoint, consult a qualified electrician.
Units shipped to Europe are designed for operation on 220V/230V AC only.

FOR OTHER COUNTRIES . . . 120V/220V

FOR YOUR SAFETY

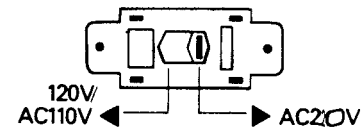
Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

A/C VOLTAGE SELECTION

This unit operates on 110-120 volts AC. The AC voltage selector switch Type A on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

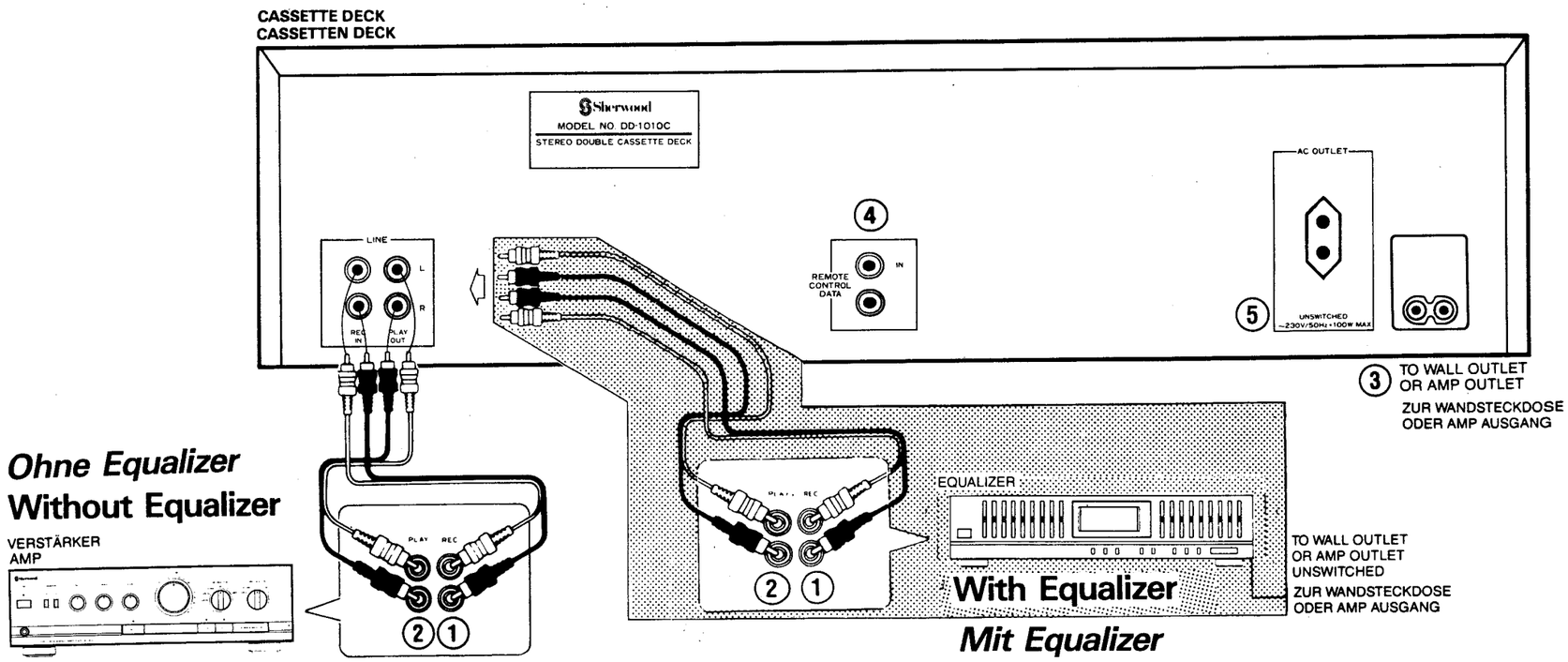
AC voltage selector switch

Type A

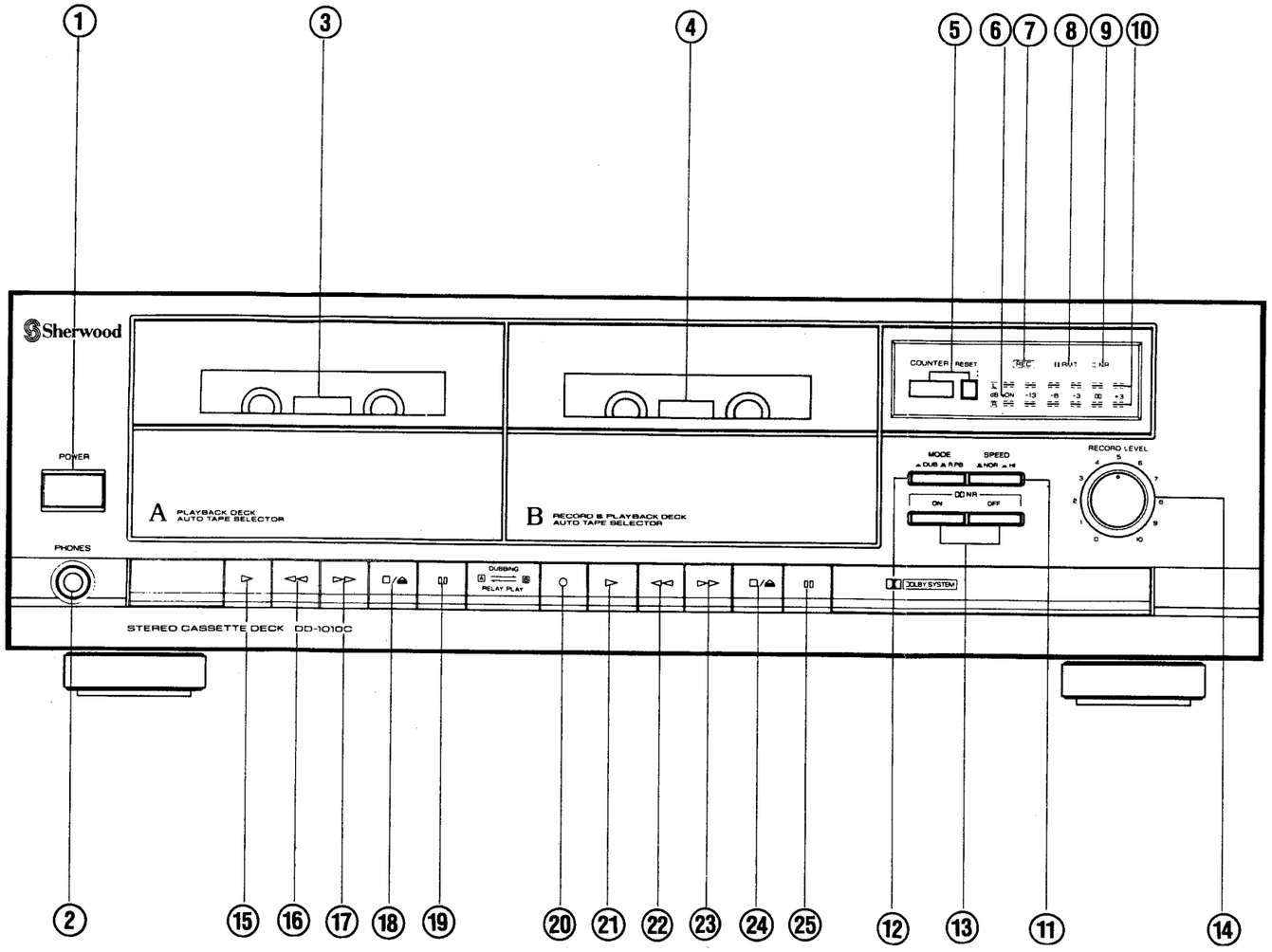


Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Rear Panel Connections
Anschlüsse an der Rückwand



Front Panel Controls
Anschlüsse In Der Rückwand



Rear Panel Connections

1. LINE REC JACKS

Connect the audio cords between the LINE REC of this unit and the TAPE OUT or TAPE REC terminal of your Amplifier or Receiver. It may be selected as a recording source.

NOTE: Make sure that the white lead (left) and red (right) are correctly connected.

2. LINE PLAY JACKS

To play tapes, connect the cords between the LINE PLAY of this cassette deck and the TAPE IN or TAPE PB terminal of your Amplifier or Receiver.

3. AC INPUT CORD

Plug cord into AC outlet on the rear panel of your Amplifier or Receiver.

4. REMOTE CONTROL DATA INPUT JACK

If your cassette deck is a part of the remote controlled system, it will have this jack. Connect this jack to the cassette deck jack of your matching Amplifier with the cable supplied.

5. AC OUTLET (unswitched) (OPTIONAL)

Front Panel Controls

1. POWER SWITCH

To turn the power on, depress the POWER switch and depress it again to turn off for the separate operation. In system operation, plug the AC cord into the switched AC outlet of the Amplifier.

2. HEADPHONE JACK (PHONES)

Connect the headphone for private listening or monitoring of program source.

3. DECK A: CASSETTE DOOR

This gear damped soft eject cassette door glides open smoothly. This door can be easily dismounted by pushing it up and then taking it out toward the front after opening the door. This gives easy access to the heads and transport parts for cleaning and demagnetizing. Depress the eject button of the Deck A to open the cassette door when Deck A is in the stop mode. Deck A plays tapes but will not record.

4. DECK B: CASSETTE DOOR

Depress the eject button of Deck B to open the cassette door when Deck B is in the stop mode. Deck B plays and records cassette tapes.

5. DECK B: TAPE COUNTER/RESET BUTTON

Set the tape counter to "000" at the beginning of the recording, so that you can make a note of the digital setting at the start of each programme to provide the convenient tape index. This tape counter funtions for Deck B only. Push RESET button to reset the tape counter to "000".

6. POWER ON INDICATOR

This indicator will light when POWER button is in ON position.

7. RECORD INDICATOR

The indicator will light when RECORD button is depressed,indicating that the Deck B is in recording mode.

8. REMOTE PAUSE INDICTOR

This indicator will light when REMOTE PAUSE from the master commander.

9. DOLBY NR INDICATORS

These indictors will light when DOLBY NR button is in ON position.

10. PEAK LEVEL DISPLAY

The LED peak level display (5 LEDs/CH) indicates the recording or output (playback) level. This is useful in recording level adjustment. See RECORDING LEVEL ADJUSTMENT of page 11.

11. DUBBING SPEED SELECTOR

This selector permits a change in tape speed for dubbing:NORMAL or HIGH speed. The HIGH position gives 1.5 times normal speed, however the better sound quality can be expected in the NORMAL position. During dubbing, don't change speed. It may cause tape click noise recorded.

12. DECK MODE SWITCH

In pushed – out position (REC/PB mode), the decks will operate as the normal cassette deck such as a playback deck for Deck A or a recording/playback deck for Deck B and also it allows the relay playback from Deck B to Deck A. In pushed – in position (DUB mode), the decks are ready for synchro dubbing from Deck A to Deck B and also it release that the DUB SPEED switch is operative.

13. DOLBY* NR SWITCH

Depress this switch in ON position when recording on Deck B with Dolby Noise Reduction system, or when playing back recordings which have been made using DOLBY NR system on Deck A or Deck B. In the dubbing mode, DOLBY NR will be automatically by passed.

Principle of DOLBY system "B" Type

The Dolby system functions so that it automatically increases recording levels of medium and high frequencies when the recording signal level is lower than the specified level (encoding), and automatically reduces the output levels to the normal level during playback (decoding). In this way, the tape hissing noise is remarkable reduced without affecting the sound quality. The Dolby NR system used in your Tape Deck improves S/N ratio by about 5 dB at 1KHz and about 10 dB at 10KHz.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

14. RECORD LEVEL CONTROL

This control adjusts the recording level in recording mode of Deck B. In DUBBING mode, this control will not function and the signals to be dubbed from Deck A to Deck B are directly recorded on Deck B.

15. DECK A: PLAY (▶) BUTTON

The tape starts running for playback as this button is depressed. Playing stops automatically when the tape reaches the end.

16. DECK A: REWIND (◀◀) BUTTON

Depressing this button starts sending the tape fast to the left hand reel. Depress the ST/EJ button when the tape reaches the end.

17. DECK A: FAST FORWARD (▶▶) BUTTON

Depressing this button sends the tape fast to the right hand reel. Depress the ST/EJ button when the tape reaches the end.

18. DECK A: STOP/SJECT BUTTON (■/▲)

As you depress this button, all other operation buttons of Deck A are released and the tape motion stops. Pressing this button again opens the door for removal of the cassette.

19. DECK A: PAUSE (❚❚) BUTTON

To momentarily pause during playback, depress this button. To starts playing, depress PAUSE button again. This button is also used for synchro dubbing from Deck A to Deck B or for relay playback from Deck B to Deck A.

20. DECK B: RECORD BUTTON (●)

When this button is depressed recording starts immediately as ONE TOUCH OPERATION. In this case, the PLAY button will be automatically depressed also.

21. DECK B: PLAY (▶) BUTTON

The tape starts running for playback as this button is depressed. Playing stops automatically when the tape reaches the end.

22. DECK B: REWIND (◀◀) BUTTON

Depressing this button sends the tape fast to the left hand reel, depress the ST/EJ botton when the tape reaches the end.

23. DECK B: FAST FORWARD (▶▶) BUTTON

Depressing this button sends the tape fast to the right hand reel, depress the ST/EJ button when the tape reaches the end.

24. DECK B: STOP/EJECT BUTTON (■/▲)

As you press this button, all other operation buttons of Deck B are released and the tape motion stops. Pressing this button again opens the door for removal of the cassette.

25. DECK B: PAUSE (❚❚) BUTTON

To momentarily pause during dubbing, recording or playback, depress this button. To start, depress it again. Also use this button for standby recording. Depress the PAUSE button first and then RECORD button simultaneously. When you are ready for recording after adjusting RECORD LEVEL controls, etc. depress PAUSE button again, the recording will start immediately. It can be also useful to skip the music selection in normal speed dubbing mode.

Playback with either Deck A or Deck B

1. Turn the power on.
2. Depress the STOP/EJECT button on Deck A or Deck B.
3. Insert pre-recorded cassette into the cassette holder with the tape side to be played facing in front and set it in place.
4. To play the tape recorded with Dolby NR, press the DOLBY NR switch.
5. Depress the PLAY button. The tape will now start playing. Adjust the volume, tone, etc. on your amplifier to suit to your listening preference.
6. To stop playing momentary, depress the PAUSE button. To start playing, depress the PAUSE button again.
7. To stop playing completely, depress the STOP/EJECT button and depress it again to open the door for removal of the cassette. When the tape reaches the end, playing stops automatically.

NOTE:

- When the PLAY buttons of the Deck A and Deck B are both depressed at the same time, both decks are in playback mode and the mixed signal will be reproduced.
- This cassette deck is a part of the remote controlled system and momentary pause during playback can be controlled by the master commander.

Relay Playback from Deck B to Deck A

1. Turn the power on.
2. Press both STOP/EJECT buttons.
3. Insert pre-recorded tape into each cassette holder with the tape side to be played facing in front and set them in place.
4. To play the tape recorded with Dolby NR, press the DOLBY NR switch.
5. Depress the PLAY button of Deck B first, then the Deck B starts playing.
6. During playback on Deck B, depress the PAUSE button on Deck A.
7. And PLAY button or Deck A in sequence, then Deck A is in the standby playback mode.
8. When the tape on Deck B reaches the end, Deck B will stop automatically and Deck A will start playing.

NOTE:

- Relay playback from Deck A to Deck B will not function.

Recording with Deck B

1. Turn the power on.
2. Set the function selector on the amplifier to the program source you wish to record: PHONO, TUNER, COMPACT DISC, etc.
3. Set the MODE switch to REC/PB position.
4. With the tape side to be recorded facing in front, insert the cassette into the cassette holder on Deck B and set it in place.
   * Check to make sure that the cassette erasure tab on the upper edge has not been removed.
5. To make a recording with Dolby NR, depress the Dolby NR switch.
6. To control the start for adjustment, depress the PAUSE button on Deck B first.
7. Depress the RECORD button on Deck B.
8. Adjust the recording level with the REC LEVEL control so that the LED PEAK LEVEL display indicates about 0 dB at the peak reading of program selected. Refer to the RECORDING LEVEL ADJUSTMENT section for details.

9. When you are ready for recording depress the PAUSE button on Deck B again, then recording will start immediately.

NOTE: If immediate recording is required rather than standby recording, depress the RECORD button on Deck B directly.

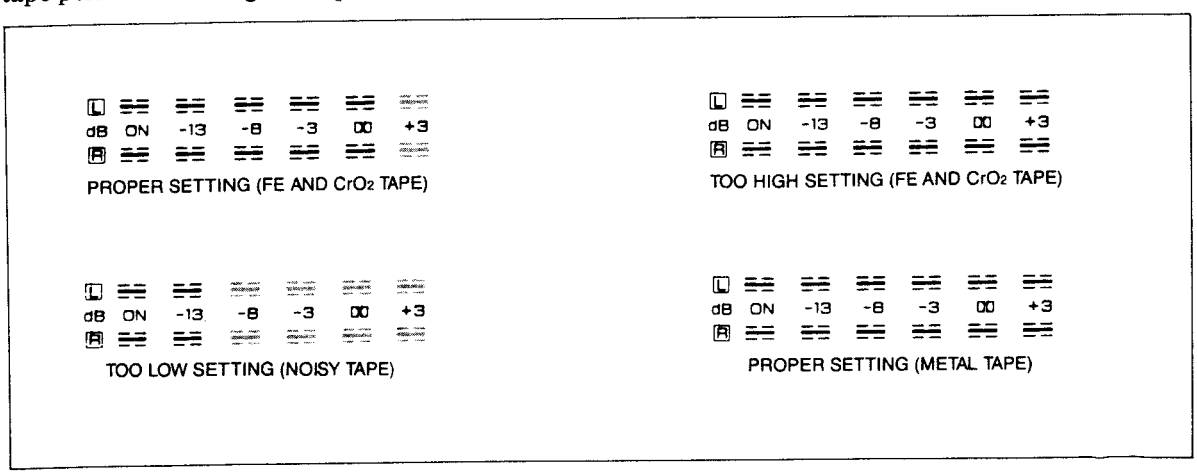
10. When the recording is finished, depress the STOP/EJECT button once. When the tape reaches the end while recording, Deck B will stop automatically.

NOTE:

- If the cassette tab on the upper edge has been removed, recording will not function.
- You can monitor the recording for quality check by speakers on your amplifier depressing the TAPE monitor switch.
- To erase a tape without adding new recording, turn the REC LEVEL control to zero and deprss the RECORD button.
- To review the just recorded selection, utilize the tape counter. Reset the counter to"000" at the start of every recording and rewind to "000" after recording for review.
- This cassette deck is a part of the remote controlled system and momentary pause during recording can be controlled by the master commander.

RECORDING LEVEL ADJUSTMENT

High recording level is recommended to reduce tape noise, but overloaded and distorted tape result if the level is too high. Generally, recording levels should be adjusted so that the level meters indicate as fully as possible to the proper level shown at below for NORMAL and CrO_2 tape except METAL tape. The METAL tape permits recording level up to +3 dB higher position on the level meter.


dB ON -13 -8 -3 00 +3
PROPER SETTING (FE AND CrO2 TAPE)
dB ON -13 -8 -3 00 +3
TOO HIGH SETTING (FE AND CrO2 TAPE)
dB ON -13 -8 -3 00 +3
TOO LOW SETTING (NOISY TAPE)
dB ON -13 -8 -3 00 +3
PROPER SETTING (METAL TAPE)

Synchro Dubbing from Deck A to Deck B

1. Turn the power on.
2. Load a pre-recorded cassette into the cassette holder on Deck A.
3. Load a blank cassette (or pre-recorded cassette to replace with new recording) into the cassette holder on Deck B. Check to make sure that the cassette erasure tab on the upper edge has not been removed.
4. Set the MODE switch to the DUB position.
5. Set the DUBBING SPEED selector to a desired position; NORMAL or HIGH speed.
6. Depress the PAUSE button of Deck A first.
7. Depress the PLAY button of Deck A second, the Deck A is in the standby playback mode.
8. Depress the RECORD button of Deck B third, then the PAUSE button of Deck A is automatically released and synchro dubbing starts.
9. To skip any selection of Deck A, depress the PAUSE button of Deck B during dubbing and depressing it again when you are ready for dubbing the next selection.
10. To stop dubbing, depress the STOP/EJECT buttons of both Decks simultaneously.

NOTE:

- In dubbing mode, the Dolby NR circuits are automatically bypassed for copying a tape, but operative for the monitoring output. If the original tape is recorded without Dolby NR, it make a copy recorded without Dolby NR. In this case, set the Dolby NR swithc to OFF for monitoring purpose.
  If the original tape is recorded with Dolby NR, it makes a copy recorded with Dolby NR. In this case, set the Dolby NR switch to ON for monitoring purpose.
- In dubbing mode, it makes a copy as the same level as that of original tape automatically, but sometimes it may make a copy with a little higher or lower level because of different recording level between brand names of tape.
- Even HIGH speed dubbing makes a copy one and a half times faster than NORMAL speed.
- During dubbing please don't change speed. It may cause tape click noise recorded.

Auto Tape Selector

When a tape loaded, the deck's circuitry will automatically set proper bias level and equalization for that type of tape.

System Remote Control Operations

1. DD-1010C can be remotely controlled if this unit is a part of sherwood compotible master component as Amplifier.
2. Power ON/OFF and momentarily PAUSE/RELEASE during playback or recording can be controlled by the master commander.
3. Not that directly changing the cassette transport's function the REMOTE PAUSE mode "REMOTE" sign ON) will not function. In this case, release the REMOTE PAUSE ("REMOTE" sign OFF) by touching the PAUSE button on the master commander or depress the STOP/EJECT button manually before changing the transport function.
4. IN CASE:
   Press button "TAPE 1" first and press button " ②" for the PAUSE/RELEASE of deck B

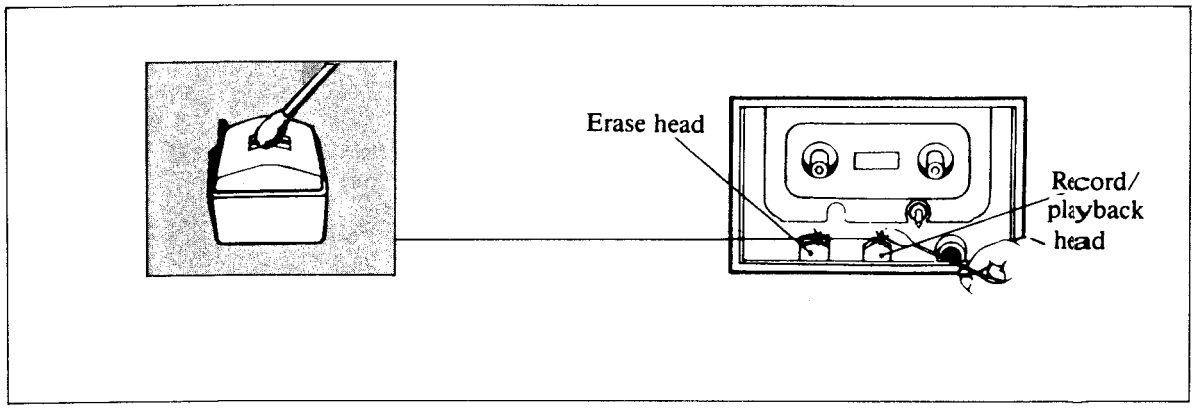
Maintenance

CLEANING OF HEADS AND TAPE PATH

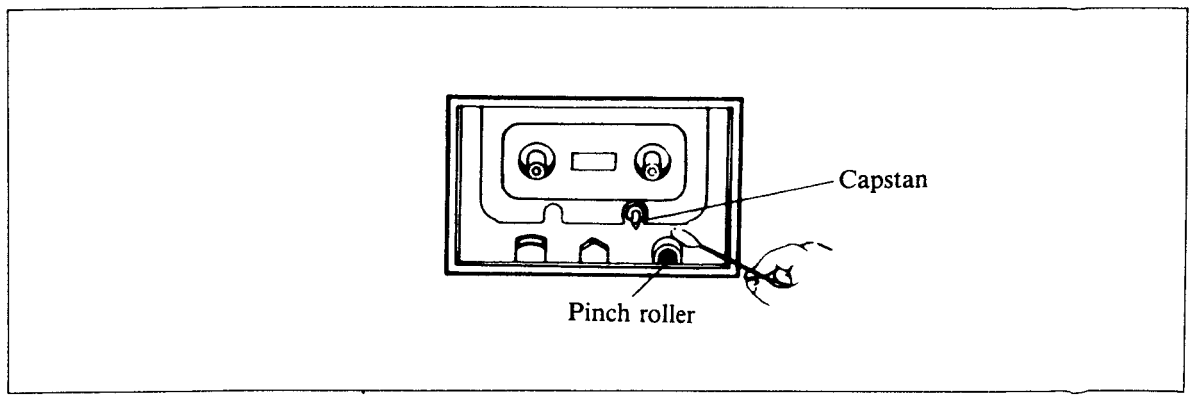
Generally, cleaning after every 10 hours of operation will be sufficient. However, all surfaces over which tape travels should be cleaned before making high quality recordings.

1. Set the POWER switch to OFF and remove cassette door lid by pushing it up and then taking it out toward and front side after opening the door.

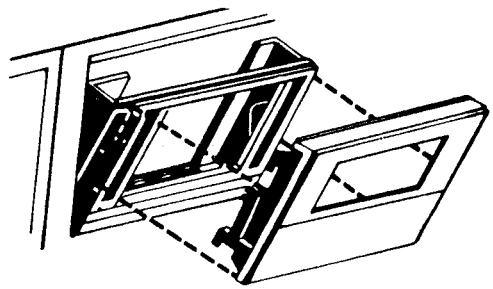
2. Wipe the heads using a cleaning tip slightly moistened with commercially available head cleaner.



3. Set the POWER switch to ON and depress the PLAY button. Wipe the capstan and pinch roller using another cleaning tip slightly moistened with the commercially available rubber cleaner. When the cleaning is finished, depress the STOP button.

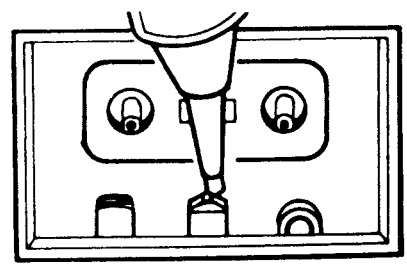


4. Replace the door lid. Do not insert a cassette until the cleaner has completely dried.



DEMAGNETIZING HEADS

Residual magnetism will gradually build up on the heads through continuous use and cause erasure of high frequencies and hiss. The heads and metallic parts of the tape path should be demagnetized after 20-30 hours of operation with a commerically available head demagnetizer. Be sure cassette deck is turned off.



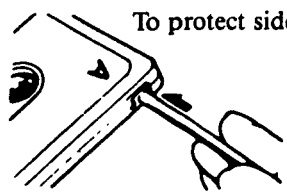
CLEANING CABINET

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild soap solution. Do not use any type of scouring powder or solvent such as alcohol or benzine.

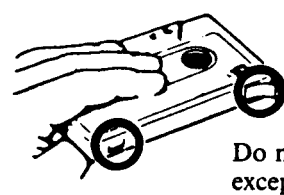
Note on Cassettes

TO PROTECT RECORDING FROM ACCIDENTAL ERASURE

Remove the tab as illustrated so that the REC button cannot be depressed. To record on a cassette after tabs have been removed, simply cover the slot with cellophane or vinyl tape.



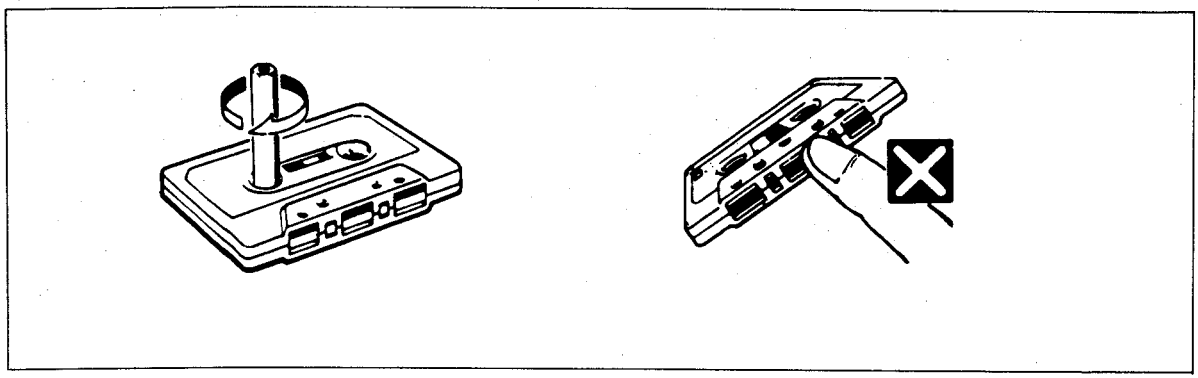
To protect side A recording



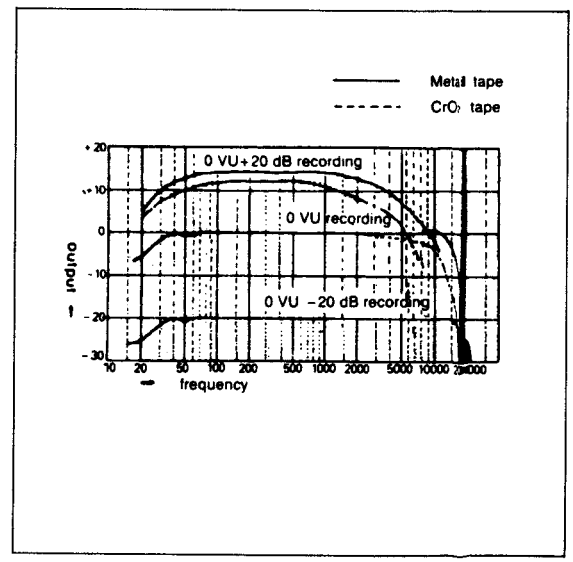
Do not stick any other material except on the portion marked ○

CASSETTE CARE

- From a tape length point of view, most of the tape manufacturers use C-60's (30 min×2) as their standard, some C-90's (45 min×2) and C-120's (60 min×2) less often. If the length of the tape is longer it can stretch and become soft. We would like to recommend that you use C-60 or C-90 tapes for better quality sound and safe tape operation. C-120 cassette tape is so thin and soft that, if the capstan or pinch roller is even slightly dirty, it often coils around the capstan or pinch roller and results in tape breakage, so if you use C-120 tape, perfectly clean capstan and pinch roller.
- Before inserting a cassette, take up the slack of the tape to prevent it from becoming entangled around the capstan.
- Avoid touching the tape surface of a cassette. Protect it from dust by storage in a case. Even minor dirt of dust could cause contamination of the heads resulting in noise and sound drop-out.



- Keep cassettes away from magnetic equipment such as speakers, amplifier, etc. as erasure or distortion of your recorded tape could occur.
- Do not expose a cassette to direct sunlight, extreme cold temperature or moisture.
- Avoid rewinding or winding in fast forward mode just before storing a cassette tape as this may cause stretching of the tape edge if it is left over a period of time.
- Do not stick any thick paper or tape on the cassette, as this may effect tape contact with the head.
- METAL: Tape is the latest development in cassette technology, an advance that allows the cassette deck to complete on equal audio terms with the new generation of amplifiers, tuners and turntables. Comparing with CHROME tape, METAL tape has better signal to noise ratio, wider frequency response and higher MOL (maximum output level).



Troubleshooting Guide

Re-read the operating instruction carefully to be sure the unit is being operated properly. You will usually find a quick solution to most problems mentioned in the following chart.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
No power turn on	• AC cord accidentally disconnected.	• Check AC cord is plugged into AC outlet properly.
No playback	• Unit is not connected properly to amplifier.	• Check cables between deck and amplifier.
	• Amplifier is not set properly.	• Depress correspending Tape MONITOR switch.
Distorted sound	• Tape heads are dirty	• Clean the heads.
	• Cassette tape is badly stretched.	• Replace the cassette.
Tape speed is erratic	• Capstan or pinch rollers are dirty.	• Clean the capstan and pinch rollers.
Audible Hum	• Audio cables are not connected.	• Check plugs on both deck and amplifier.
	• Pick up AC magnetic field.	• Increase distance between deck and other components or equipments.
No recording	• Erasure tabs on the cassette have been removed.	• Cover the openings with adhesive tape.
	• Line REC Level controls are at the minimum.	• Increase REC LEVEL controls.

Specifications

Type	Soft touch front loading stereo double cassette deck with Dolby NR system.
Track system	4 track, 2 channel stereo playback (Deck A) and recording/playback (Deck B)
Recording system	AC bias system (bias frequency: 105KHz)
Erasing system	AC system
Tape speed	1-7/8 ips (4.76cm/sec.)
Heads	Hard permalloy recording/playback head×1 Hard permalloy playback head×1 Double gap erasing head×1
Motor	Electronic governor controlled DC motor
Wow and flutter	Less than 0.15% (WRMS), 0.30% (DIN)
Fast winding time	Approximately 120 seconds with C-60 cassette tape
Frequency Response	
−20 dB REC	Normal tape 35-16,000Hz, ±5 dB
Dolby NR OFF	CrO_2 tape 35-16,000Hz, ±5 dB METAL tape 35-16,000Hz, ±5 dB
0 dB REC/PB	Dolby NR 62 dB (Normal tape)
Signal to noise ratio	(Weighted) 64 dB (CrO_2 tape)
(REC/PB)	64 dB (Metal tape)
	Dolby NR OFF 53 dB (Normal tape)
	(Weighted) 55 dB (CrO_2 tape)
	55 dB (Metal tape)
3rd harmonic distortionL	Less than 1.3% at 1KHz, 0 dB REC/PB
Input sensitivity/Impedance	LINE 70mV/47K ohms
Output level/Impedance	LINE 500mV/2.7K ohm
Built-in features	Dolby NR system. Relay playback, Synchronous dubbing High speed dubbing selector LED peak level display (5 LED×2) Auto tape selector Remote control operations (PAUSE) Power consumption 13 Watts
Dimensions	440(W)×142(H)×245(D) mm 17.3(W)×5.6(H)×9.6(D) inches 4.7Kg (10.3 lbs)

NOTE:
- Specifications and the design subject to change without notice for improvements.
- Recommended design reference tape (TDK) AD-C60 (normal), SA-C60 (CrO_2), MA-C60 (metal)